

REMARKS

Claims 16-18, 27 and 28 are rejected, under 35 U.S.C. § 102(b), as being anticipated by Hunter et al. '231. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

Hunter et al. '231 describes a method and system for high speed machining involving the positioning of the waist of a laser beam to provide for variations in the local height of a work piece. The positioning is governed by means of several controllers making use of reference data generated by the system. The reference data is established, at least in part, by means of the laser beam which is adapted to operate either in a machining mode (high power) or can be modulated in power to provide for the laser beam to act as a probe mapping the local heights of the work piece. The probe mode gives a mapping of an area to be machined which is subsequently completed by the machining mode. The controllers and method of operation required by Hunter et al. '231 are relatively complex. Hunter et al. '231 is particularly concerned with a work piece in which intentional existing local height changes in a work piece are to be modified.

In the present invention, the need for the relatively complex method and system of Hunter et al. '231 is obviated since the present case is particularly concerned with virgin work pieces containing surface defects which are unintentional and usually random. Consequently, a need for a separate mapping step is not required. The present application achieves its end by providing a system in which variation in laser "waist height" is achieved by means of a sensing device floating on a fluid cushion.

In any event, in accordance with the indication by the Examiner that the subject matter of previous claims 19, 20, 25 and 26 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims, new claim 29 includes substantially the subject matter of previous claims 16 and 19. As claims 30-33 depend there from these claims are believed allowable as well. New independent claim 34 is substantially the subject matter of previous claims 22 and 25, and as claims 35-39 depend from new claim 34 which is believed to be allowable, these claims are thus also believed to be allowable

as well. While the new claims are believed to overcome the anticipation and obviousness rejections, for purposes of being fully responsive to the most recent official action the Applicant provides the following remarks relevant towards the obviousness rejection of the present invention over Hunter et al. '231 in view of Shimoto et al. '421.

Claims 21-24 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Hunter et al. '231 in view of Shimoto et al. '421. The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the following remarks.

The fundamental differences between the present application and Hunter et al. '231 have been touched on above. Shimoto et al. '421 reveals a carrier table which is tiltable. While it is acknowledged that Shimoto et al. '241 does show such a carrier, it does not do so in a way that falls in the context of the present application. No case is apparent for choosing to combine the Hunter et al. '231 and Shimoto et al. '241 applications. Neither citation, whether on their own or combined, reveal the significant concept of the present application, namely, the use of a sensing device floating on a fluid cushion.

The Applicant thanks the Examiner for indicating that claims 19, 20, 25 and 26 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claim(s). In accordance with this indication, the above noted new independent claims 29 and 34 are provided and as the remaining dependent claim(s) depend, either directly or indirectly, from these new independent claims, those dependent claims are believed to be allowable as well.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised anticipation and obviousness rejection(s) should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the Hunter et al. '231 and Shimoto et al. '421. references,

the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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